ABSTRACT

In a data processing system that executes a program of instructions, a method of inverting a distorted surface in a detail-in-context presentation is provided comprising the steps of locating a first approximation point in an undistorted surface for the inversion of a point in a distorted surface, determining if the approximation point is acceptable as an inversion of the point in the distorted surface, locating a next approximation point in the undistorted surface if the first approximation point is not acceptable, and repeating this process until an acceptable approximation point is located for the inversion of the point in the distorted surface. The use of this method to obtain the distance between points on an undistorted surface from the relative distances between corresponding points on a plurality of distorted surfaces in a detail-in-context presentation is provided. A data processing system for the inversion of detail-in-context presentations is provided including an input device, a central processing unit, memory, and a display wherein said data processing system has stored therein data representing sequences of instructions which when executed cause the method described to be performed.